

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

MAD DOGG ATHLETICS, INC.	)	
	)	
Plaintiff,	)	Case No. 2:20-cv-00382-JRG
	)	
v.	)	
	)	
PELOTON INTERACTIVE, INC.	)	<b>JURY TRIAL DEMANDED</b>
	)	
Defendant.	)	

**PLAINTIFF MAD DOGG ATHLETICS, INC.'S  
OPENING CLAIM CONSTRUCTION BRIEF**

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## I. INTRODUCTION

Mad Dogg Athletics, Inc. construes the claim terms in accordance with their plain meanings in light of the surrounding claim language, the specification, and the remainder of the intrinsic evidence. The straightforward claims are directed to an innovative exercise bike and use well-recognized terms that align with their ordinary and customary meanings. As such, Mad Dogg's constructions follow the well-established canons of claim construction set forth by the Federal Circuit, and nothing in the claim language, the specification or other portions of the intrinsic record compels a different result.

In contrast, Peloton Interactive, Inc.'s proposed constructions seek to sow confusion where none exists. In some instances, Peloton improperly seeks a means-plus-function interpretation even though the words "means for" never appear in the claims and the claim language invokes well-known structures. In other instances, Peloton runs afoul of basic claim construction principles by seeking to limit certain claim terms to a particular embodiment in the specification without justification. Finally, Peloton contends that well-understood and commonly used terms of degree are not readily ascertainable to a person of skill in the art. Each of Peloton's arguments fails.

## II. THE ASSERTED PATENTS AND THE CLAIMED INVENTIONS

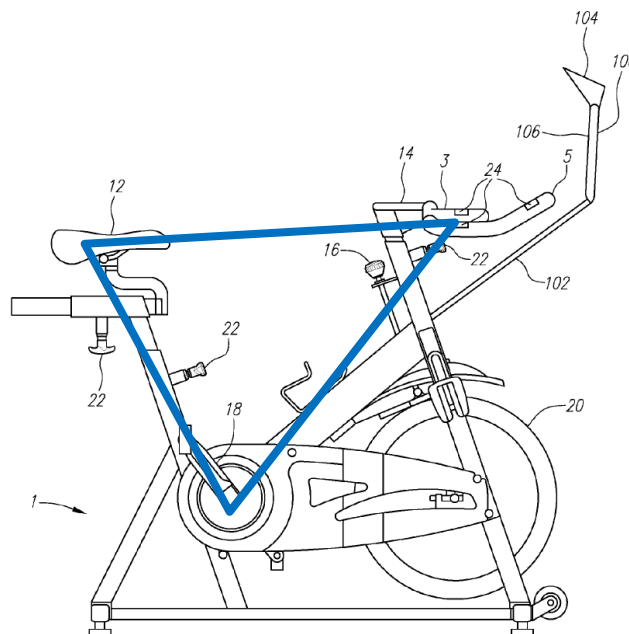
The inventions claimed in U.S. Patent No. 9,694,240 (the "'240 patent," Ex. A<sup>1</sup>) and U.S. Patent No. 10,137,328 (the "'328 patent," Ex. B, collectively, the "Asserted Patents")<sup>2</sup> are directed to a class of stationary exercise bikes that provide a rider with an experience akin to riding an outdoor road bike and enabled today's multi-billion dollar internet connected at-home exercise bike industry. Figure 1 of the Asserted Patents, reproduced below with annotation, illustrates a

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<sup>1</sup> All exhibits are attached to the Declaration of David I. Gindler, filed herewith.

<sup>2</sup> The Asserted Patents share identical specifications. For ease of reference, Mad Dogg will refer to the specification of the '240 patent.

preferred embodiment of the claimed inventions. It shows a stationary exercise bike that is adjustable and has a geometrical relationship between the seat, pedals, and handlebars that allows a rider to mimic riding positions on an outdoor road bike. This “open geometry” is structurally different from other types of stationary exercise bikes, such as upright and recumbent bikes,<sup>3</sup> and allows a rider to sit or stand while cycling because, as shown by the blue triangle annotation, the rider’s feet are positioned in front of the seat and behind the handlebars and the seat and handlebars are located at similar heights. Ex. A at 3:3-8. The bike “preferably includes adjustable seat assembly 12, adjustable handlebar 14 having multiple hand position[s], variable resistance mechanism 16, pedal assembly 18 and flywheel 20 which is coupled to pedal assembly 18 in a direct drive (fixed gear) and/or non direct drive e.g., freewheeling configuration.” *Id.* at 3:8-13.



The innovative combination of this frame geometry and a direct drive mechanism that couples a

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<sup>3</sup> Prior art upright and recumbent exercise bikes are described in the specification, Ex. A at 1:54-60, 2:28-37, 7:12-41, and include those created by LIFECYCLE, *see* Ex. C, LIFECYCLE’s SU70 upright bike and SR70 recumbent bike. Distinctions between the claimed exercise bike of the Asserted Patents and prior art upright and recumbent exercise bikes are discussed *infra* at Section III.B.

pedal assembly and a flywheel allows a rider to sit or stand while pedaling, with smooth transitions when switching between such positions while riding. *Id.* at 7:51-55.

The improved exercise bike of the claims is not only defined by its structural configuration, but also includes a computer and a display that “provide[] instruction to the individual so that the individual may receive benefits typically received during an [in-person] instructor-led class.” *Id.* at 2:10-19. The claimed stationary exercise bike overcomes the shortcomings of prior art exercise bikes that did not provide these benefits by incorporating, among other things, (i) a computer “configured to connect with the internet or other computer network to access a collection of exercise routines” and (ii) a display that shows “an exercise routine from the collection of exercise routines so that the rider is provided with instructions” relating to pedaling resistance, cadence, and sitting and standing positions. *See, e.g.*, Ex. A at claims 1, 14; Ex. B at claim 1. This ordered combination of structures—frame, direct drive mechanism, handlebars, resistance mechanism, along with the networked computer, display, and input device—provides the improved exercise bike claimed in the Asserted Patents.

### III. CONSTRUCTION OF THE DISPUTED CLAIM TERMS

#### A. The Preambles of Claims 1 and 14 of the ’240 Patent and Claim 1 of the ’328 Patent Are Limiting in Their Entirety.

Term (Claim No.)	Mad Dogg’s Construction	Peloton’s Construction
“An exercise bike, comprising”/“A stationary bike, comprising” (’240 patent – 1, 14; ’328 patent – 1)	Preamble is limiting in its entirety	The preamble is not limiting. To the extent the preamble is found to be limiting, it should be given its plain and ordinary meaning.

The preambles of claims 1 and 14 of the ’240 patent recite “An exercise bike” and the preamble of claim 1 of the ’328 patent recites “A stationary bike.” The Federal Circuit has provided ‘guideposts’ for when the preamble is limiting: (1) the preamble is “necessary to give life,



meaning, and vitality to the claim”; (2) terms in the body of the claim depend on a “preamble phrase for antecedent basis”; (3) “the preamble is essential to understand limitations or terms in the claim body”; and (4) the preamble recites “additional structure or steps underscored as important by the specification.” *UNILOC 2017 LLC v. Verizon Commc’ns, Inc.*, No. 2:18-cv-00536-JRG, 2020 WL 805271, at \*10 (E.D. Tex. Feb. 18, 2020), *aff’d*, 846 F. App’x 914 (Fed. Cir. 2021) (quoting *Catalina Mktg. Int’l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002)). These guideposts dictate that the preamble is limiting here.

**First**, the preambles—“an exercise bike” and “a stationary bike”—provide antecedent basis for the phrase “the stationary bike” that appears in the body of each independent claim. *Compare* Ex. B at 8:2 (“A stationary bike . . .”), *with id.* at 8:13 (“the stationary bike”). Thus, the preamble provides context for the later term “the stationary bike.”

**Second**, the body of the disputed claims sets forth individual structural elements largely without contextual reference to the claimed “exercise bike”/“stationary bike.” Ex. A at 7:50-8:10. For example, if the Court were to read the preamble out of the claims, the limitations reciting a flywheel would lack context as to what the flywheel is included in or used for.

**Third**, “[t]he specification is replete with references to the invention” as an exercise bike/stationary bike. *See Poly-Am., L.P. v. GSE Lining Tech., Inc.*, 383 F.3d 1303, 1310 (Fed. Cir. 2004). For example, the Asserted Patents are entitled: “Programmed **Exercise Bicycle** With Computer Aided Guidance.”<sup>4</sup> The specification also explains:

- “The invention pertains to **a stationary exercise bike** . . . .” Ex. A at Abstract;
- “[A] need exists for **a stationary exercise bike** for use by an individual . . . . There also exists a need for **the stationary bike** to . . . .” *Id.* at 2:10-19;

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<sup>4</sup> All emphasis is added unless otherwise noted.

- “In a first aspect of the invention, *a stationary exercise bike* for [i]ndoor cycling is used . . . . In another aspect of the invention, *a stationary exercise bike* . . . is described.” *Id.* at 2:42-48;
- “FIG. 1 shows *a stationary exercise bike 10* . . . .” *Id.* at 3:3-4; and
- “*Bike 10 of the current invention* provides many benefits over *other stationary bikes* . . . . Many such *stationary bikes* simply do not offer the type of workout that *the current bike* offers. . . . *bike 10 of the current invention* is intended for alternating standing and sitting and thus allows different riding positions.” *Id.* at 7:11-19.

**Fourth**, during prosecution, Mad Dogg relied on the preamble to distinguish the claimed invention from the prior art. For example, in response to a March 31, 2015 office action relating to the ’240 patent, Mad Dogg amended the preamble of the claims to replace the term “device” with the term “bike” as follows: “An exercise bike ~~device~~.” Ex. D, September 30, 2015 Response at 2. Mad Dogg made a similar preamble amendment during prosecution of the ’328 patent, replacing “exercise device” with “stationary bike.” Ex. E, March 13, 2018 Response at 2. Mad Dogg also argued against an obviousness prior art rejection by explaining that “[w]ith . . . its SPINNER® bikes and eSPINNER® bikes, [Mad Dogg] created the exercise category of indoor cycling.” Ex. F, January 13, 2017 Response at 6. Mad Dogg further distinguished its invention from prior art relating to treadmills, noting “[t]hat Watterson only disclosed such automated mechanized adjustment makes sense when considering that Watterson is primarily directed to treadmills . . . .” Ex. G, July 6, 2016 Response at 6.

**B. “A Frame That Is Configured to Allow a Rider to Ride in a Sitting and Standing Position” Should Be Given Its Plain and Ordinary Meaning.**

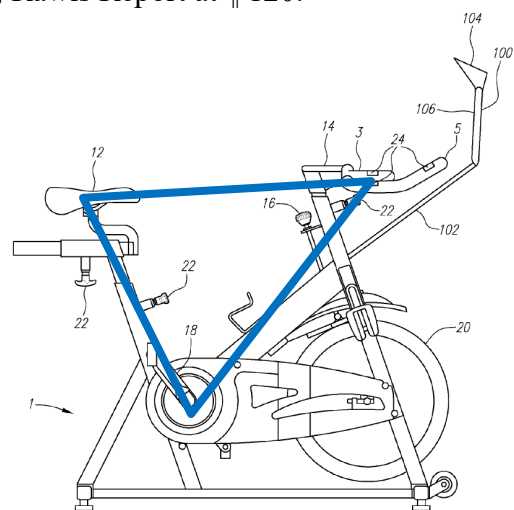
Term (Claim No.)	Mad Dogg’s Construction	Peloton’s Construction
“a frame that is configured to allow a	Plain and ordinary meaning	Plain and ordinary meaning

rider to ride in a sitting and standing positions” (’240 patent – 1, 14; ’328 patent – 1)		To the extent Mad Dogg seeks to import some specific criteria (e.g., open geometry, support structures) that it contends establish that some frames are configured to allow a rider to ride in sitting and standing positions while others are not, the term is indefinite.
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The parties agree that the claim term “a frame that is configured to allow a rider to ride in a sitting and standing positions” should be construed in accordance with its plain and ordinary meaning. The Court’s analysis of this term can stop here. Mad Dogg’s construction does not seek to “import some specific criteria” that, according to Peloton, would somehow render the term indefinite. The criteria for meeting this claim limitation are expressed in the plain and ordinary meaning of the claim language, period.

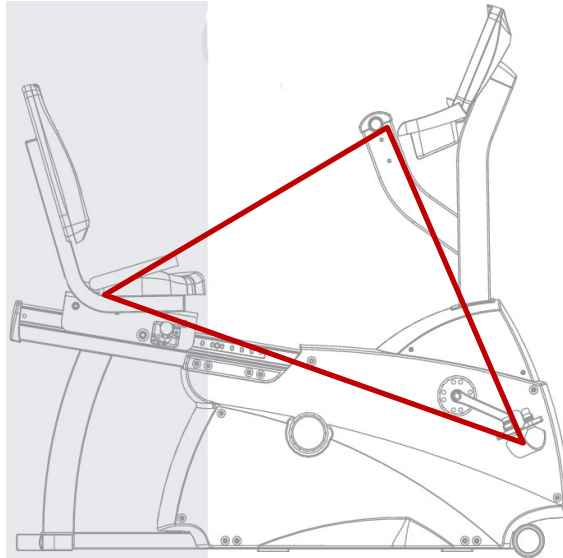
A frame “that is configured to allow a rider to ride in a sitting and standing position” is clear and simple for a jury to understand. Peloton’s expert, R. Lee Rawls, agrees that “such bikes were common around 2005 (and were for many years before) and a POSITA [person of ordinary skill the art] familiar with bicycles and exercise equipment would easily recognize bikes that allow a rider to both sit and stand on them while riding.” Ex. H, Rawls Report at ¶ 120.

As explained *supra* at Section II, the claimed frame of the stationary exercise bike, as embodied in Figure 1 of the Asserted Patents, clearly allows a rider to ride in a sitting and standing position because of the spatial relationship between the seat, pedals and handlebars (as illustrated by the blue triangle in the image at right).



By way of contrast, the frame of a recumbent-style stationary exercise bike, as shown in

LIFECYCLE's SR70 recumbent bike below, is not "configured to allow a rider to ride in a sitting and standing position." Peloton's expert, Mr. Rawls, agrees. Ex. I, Rawls Tr. at 146:12-15 ("I don't think it's practical to stand on a recumbent bike."). By positioning the pedals in front of the handlebars (illustrated by the annotated red triangle), recumbent exercise bikes *prevent* a user from riding in a standing position.



Ex. C (annotated).

Unlike the claimed inventions, the design of a recumbent exercise bike requires a user to pedal from a sitting position. The specification distinguishes examples of prior art recumbent exercise bikes including those created by LIFECYCLE. *See* Ex. A at 7:12-31; *see also* Ex. C. Peloton's expert made no attempt to read prior art recumbent exercise bikes on this feature of the claimed invention.<sup>5</sup> The Court should adopt the plain and ordinary meaning of this term as agreed by the parties.

<sup>5</sup> During prosecution of the '240 patent, Mad Dogg distinguished the pending claims over a recumbent exercise bike of U.S. Patent No. 7,022,048 ("Fernandez"), noting that "it does not appear that the bike of Fernandez may be ridden in a standing position." Ex. D, September 30, 2015 Response at 6. The examiner dropped his reliance on the recumbent exercise bike of Fernandez in the subsequent office action. Ex. J, January 6, 2016 Office Action at 2-4.

**C. “A Direct Drive Mechanism That Couples a Pedal Assembly and Flywheel and That Facilitates a Smooth Transition Between Sitting and Standing Positions” Should Be Given Its Plain and Ordinary Meaning.**

<b>Term (Claim No.)</b>	<b>Mad Dogg’s Construction</b>	<b>Peloton’s Construction</b>
“a direct drive mechanism that couples a pedal assembly and flywheel and that facilitates a smooth transition between sitting and standing positions” (’240 patent – 1, 14; ’328 patent – 1)	Plain and ordinary meaning (to the extent the term “smooth transition” is not found indefinite)	Plain and ordinary meaning (to the extent the term “smooth transition” is not found indefinite)  To the extent Mad Dogg seeks to import some specific criteria ( <i>e.g.</i> , open geometry, support structures) that it contends establish that some frames are configured to allow a rider to ride in sitting and standing positions
“smooth transition” (’240 – 1, 14; ’328 – 1)	Should be construed as part of “a direct drive mechanism that couples a pedal assembly and flywheel and that facilitates a smooth transition between sitting and standing positions”; but if construed separately, plain and ordinary meaning	Indefinite

The parties agree that the term “a direct drive mechanism that couples a pedal assembly and flywheel and that facilitates a smooth transition between sitting and standing positions” should be construed in accordance with its plain and ordinary meaning. No further analysis is required. Mad Dogg does not seek to import anything into its claim construction; just like Peloton, Mad Dogg relies exclusively on the plain and ordinary meaning of the claim language.

The parties’ sole disagreement on this term is whether the phrase “smooth transition” in the context of the claim language is indefinite. Peloton’s expert Mr. Rawls contends that “[t]he ‘smoothness’ of a transition between sitting and standing means something different to *every bike rider* and can also mean something different depending on the bike design.” Ex. H at ¶ 134. As an initial matter, “every bike rider” is not a POSITA and not the appropriate perspective from which

the term should be interpreted. Moreover, in his deposition, Peloton's expert admitted that a POSITA can determine whether the movement of an exercise bike is "smooth." For example, Mr. Rawls conceded that the mechanical elements of an exercise bike, such as their "bearings," "brakes," and the "balance" of the "flywheel," and not simply a user's perception, contribute to the smoothness of the bike's flywheel movement. Ex. I at 118:18-119:16. Mr. Rawls also stated that a POSITA can recognize when "[a flywheel's movement] isn't smooth, it's rough or noisy or whatever it is" and, in response, "could create a bike that eliminated a lot of the mechanical roughness." *Id.* at 120:4-10, 144:12-13. In this regard, he acknowledged that "the more inertia you put into the system, the more it would smooth out [a rider's] cadence." *Id.* at 130:23-131:9; *see also* Ex. K, U.S. Patent No. 5,961,424 (the "'424 patent") at 1:28-30 (stating that a high-inertia "flywheel provides a **smooth, non-jerky** pedaling rhythm which provides an efficient and rigorous exercise for the rider . . .").<sup>6</sup>

In fact, Peloton's expert acknowledges that, as a POSITA, he can recognize the difference between a "smooth transition" and a transition that is not smooth—and has experienced both many times. Ex. I at 146:23-147:6 ("Q. You've experienced smooth transitions from sitting to standing positions on numerous different bikes, correct? A. Correct. Q. And have you experienced transitions from sitting to standing positions on exercise bicycles that are not smooth? A. Yes.")). He also agrees that an exercise bike with a high-inertia flywheel can provide a "smooth transition from sitting to standing positions" at lower RPMs. *Id.* at 148:21-25. In sum, Peloton's expert has no problem recognizing a "smooth transition" between sitting and standing positions and whether an exercise bike can facilitate a smooth transition (even though every rider's personal experience may not always be the same).

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<sup>6</sup> The specification incorporates the '424 patent by reference. Ex. A at 3:17-18.

Mr. Rawls’s expert declaration is also flawed because he fails to construe the term “smooth transition” within the context of the entire claim limitation—“a *direct drive mechanism* that couples a *pedal assembly* and *flywheel* and that facilitates a smooth transition between sitting and standing positions”—which recites features that would be familiar to a POSITA and that a POSITA would understand facilitate a “smooth transition.” *See* Ex. A at 7:53-55. For example, the ’424 patent (incorporated by reference into the specification of the Asserted Patents) confirms that a POSITA would understand a direct drive mechanism coupled to a pedal assembly and a flywheel may facilitate a “smooth transition between sitting and standing positions,” as illustrated by the following disclosures:

- “Other benefits are derived from the *direct drive interaction between the inertia flywheel and the crank arms . . . .* The *inertia flywheel provides a smooth, non-jerky pedaling rhythm . . . .*” Ex. K at 1:26-31;
- “The *inertia wheel provides means for continued drive train (wheel to crank to leg) movements* during those periods when the crank is in top dead center or bottom dead center positions, where the rider’s legs are somewhat weaker in providing rotary motion to the activating crank arms. The *flywheel affords smooth and steady operation for the rider.*” *Id.* at 1:37-43; and
- “the present invention maintains the ‘pedal through’ benefit of *standard direct drive exercise bicycles*. The pedal-through benefit *helps the rider pedal continuously and smoothly* through the top and bottom pedal positions where riders typically are weakest.” *Id.* at 8:5-9.

The Hernandez patent mentioned in the specification, Ex. A at 2:28-37, further confirms that a smooth transition between sitting and standing positions was an understood concept as it

*distinguishes “standard stationary bikes that do not allow for a smooth ride while ‘climbing’, ‘jumping’, or ‘free-wheeling,”* Ex. L, U.S. Patent No. 6,287,239 (“Hernandez”) at 1:41-44, whereby “jumping” refers to “alternately sitting and standing, for a period of time,” *id.* at 1:27-28. Hernandez further notes that the “Spinning” cycle “differs from standard stationary bicycles, in that it *contains a 45-pound ‘flywheel’* which allows for manual resistance control and for constant resistance. Thus, *the user may stand or sit on the cycle, without having the pedals ‘give way’, as they would with a stationary cycle.*” *Id.* at 1:28-34. A POSITA would recognize the scope of a “smooth transition” between sitting and standing positions with reasonable certainty in light of the disclosure in Hernandez.

In addition, the specification contrasts classes of stationary exercise bikes that do not allow smooth transitions between sitting and standing, noting: “[f]or example, the LIFECYCLE type bike does not have the geometry to permit alternating standing and sitting in a smooth manner. In contrast, bike 10 of the current invention is intended for alternating standing and sitting and thus allows different riding positions.” *Id.* at 7:15-20.<sup>7</sup> The specification clearly reinforces a POSITA’s understanding of a “smooth transition” in the context of the claimed exercise bike.

Accordingly, although the term “smooth transition” is a term of degree, it informs those skilled in the art, when read in the context of the claim language and specification, about the scope of the claimed invention with reasonable certainty. Many decisions from the Federal Circuit and this Court have recognized that terms of degree, when construed in the context of the intrinsic evidence, convey the scope of the claimed invention with reasonable certainty. *See, e.g., Sonix Tech. Co. v. Publ’ns Int’l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017) (“reject[ing] the proposition

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<sup>7</sup> As noted above, a “LIFECYCLE type bike” refers either to a recumbent stationary exercise bike or an upright stationary exercise bike. *See supra* at Section III.B.



that claims involving terms of degree are inherently indefinite . . . [because] ‘claim language employing terms of degree has long been found definite where it provided enough certainty to one of skill in the art when read in the context of the invention’”); *Luv N’ Care, Ltd. v. Jackel Int’l Ltd.*, 115 F. Supp. 3d 808, 831-32 (E.D. Tex. 2015) (finding a term to be “‘one of degree’ . . . does not, by itself require a finding of indefiniteness” and finding that the term “maximum distance” was definite because a person of ordinary skill in the art “would understand the meaning of the term . . . in the context of the claims and specification”); *Immersion Corp. v. Samsung Elecs. Am., Inc.*, No. 2:17-CV-572-JRG, 2018 WL 5005791, at \*15 (E.D. Tex. Oct. 16, 2018) (finding definite the term “approximately planar touch surface,” wherein “approximately” was admitted to be term of degree); *Ultravision Techs., LLC v. Holophane Eur. Ltd.*, No. 2:19-CV-00291-JRG-RSP, 2020 WL 6271231, at \*9-11 (E.D. Tex. Oct. 26, 2020) (rejecting defendant’s argument that a term of degree, “substantially,” rendered the claims indefinite); *RevoLaze LLC v. J.C. Penney Co., Inc.*, No. 2:19-cv-00043-JRG, 2020 WL 697891, at \*11-12 (E.D. Tex. Feb. 11, 2020) (finding that the term “overetching” was not indefinite as a subjective term of degree without objective boundaries because the term informed the meaning of related claim terms).

Nor is there anything inherently indefinite about the term “smooth” itself. *See Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc.*, 796 F.2d 443, 450 (Fed. Cir. 1986) (the term “smooth” was not indefinite because a person of ordinary skill in the art would understand the use of “smooth” within the context of the claim); *Advanced Aerospace Techs., Inc. v. United States*, 124 Fed. Cl. 282, 295 (Fed. Cl. 2015) (finding that “smooth” was not indefinite—over defendant’s objection that the patentee “failed to provide an ‘objective means’ to determine . . . whether an arrangement is ‘smooth’ or ‘non-smooth’”—because the term related to the intended structure). The Court should adopt the plain and ordinary meaning of the entire claim limitation and reject

Peloton’s argument that “smooth transition,” in isolation, is indefinite.

**D. “A Mechanism That Provides Resistance to the Flywheel and That Is Manually Adjustable by the Rider to Vary the Pedaling Resistance” Should Be Given Its Plain and Ordinary Meaning.**

<b>Term (Claim No.)</b>	<b>Mad Dogg’s Construction</b>	<b>Peloton’s Construction</b>
“a mechanism that provides resistance to the flywheel and that is manually adjustable by the rider to vary pedaling resistance” (’240 patent – 1, 14; '328 patent – 1)	No construction required; plain and ordinary meaning; not governed by 35 U.S.C. § 112(f) (pre-AIA § 112(6))	As governed by 35 U.S.C. § 112(f) (pre-AIA § 112(6)): <ul style="list-style-type: none"> <li>• Recited function: providing resistance to the flywheel in a way that is manually adjustable by the rider to vary the pedaling resistance</li> <li>• Disclosed structure: structure labeled with reference numeral 16 as depicted in Figure 1 (friction brake)</li> </ul>

The claim term “a mechanism that provides resistance to the flywheel and that is manually adjustable by the rider to vary pedaling resistance” should be construed in accordance with its plain and ordinary meaning. The term is readily understandable by a lay juror based on its plain language—it uses familiar words that require no specialized knowledge, education or training.

Peloton cannot overcome the strong presumption that § 112, ¶ 6 does not apply in the absence of the word “means.” *See, e.g., Zeroclick, LLC v. Apple Inc.*, 891 F.3d 1003, 1007 (Fed. Cir. 2018). The presumption can only be overcome if the claim fails to recite “sufficiently definite structure” or else merely recites a “function without reciting sufficient structure for performing that function.” *Id.* The test here is whether “the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure.” *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015) (*en banc* in relevant portion); *see also Cypress Lake Software, Inc. v. Samsung Elecs. Am., Inc.*, 382 F. Supp. 3d 586,

598 (E.D. Tex. 2019) (“The presumption stands or falls according to whether one of ordinary skill in the art would understand the claim with the functional language, in the context of the entire specification, to denote sufficiently definite structure or acts for performing the function.”). “The question whether [a term] invokes section 112, paragraph 6, depends on whether persons skilled in the art would understand the claim language to refer to structure, assessed in light of the presumption that flows from the drafter’s choice not to employ the word ‘means.’” *Samsung Elecs. Am., Inc. v. Prisia Eng’g Corp.*, 948 F.3d 1342, 1354 (Fed. Cir. 2020).

This Court and others have repeatedly found that claims terms including the word “mechanism” are not nonce words requiring a means-plus-function interpretation. *See, e.g., Nanology Alpha LLC v. WITec Wissen. Instr. & Tech. GmbH*, No. 6:16-CV-00445-RWS, 2017 WL 5905272, at \*9-11 (E.D. Tex. Nov. 30, 2017) (finding that “movement mechanism” imparted structure); *Accuhale LLC v. AstraZeneca LP*, No. 6:11-cv-707, 2013 WL 4045904, at \*8 (E.D. Tex. Aug. 7, 2013) (“Because ‘rotation mechanism’ is one that is understood to describe structure, 35 U.S.C. § 112 ¶ 6 does not apply and ‘rotation mechanism’ is not a means-plus-function term.”); *Unicorn Glob. Inc. v. Golabs, Inc.*, No. 3:19-CV-0754-N, 2020 WL 2745692, at \*5 (N.D. Tex. May 26, 2020) (finding “rotating mechanism” to not implicate means plus function); *Integrity Worldwide LLC v. Rapid-EPS Ltd.*, No. 3:17-CV-0055-K, 2018 WL 3609430, at \*4-5 (N.D. Tex. May 29, 2018) (construing “locking mechanism” as plain and ordinary meaning and not a means-plus-function element because it conveyed sufficient structure); *Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, 1583 (Fed. Cir. 1996) (“detent mechanism” was not subject to § 112, ¶ 6 because “detent,” while describing the function it performs, denotes a type of device with a generally understood meaning in the mechanical arts); *Uni-Sys, LLC v. U.S. Tennis Ass’n Nat’l Tennis Ctr. Inc.*, No. 17-CV-147-KAM-CLP, 2020 WL 3960841, at \*13 (E.D.N.Y. July 13, 2020)

(“In the term ‘retention mechanism,’ the modifier ‘retention’ provides sufficient structure when modifying the term ‘mechanism’ to place the claim outside the scope of 35 U.S.C. § 112 ¶ 6.”); *Midwest Athletics & Sports All. LLC v. Xerox Corp.*, No. 6:19-CV-06036-EAW, 2020 WL 7692767, at \*14 (W.D.N.Y. Dec. 28, 2020) (finding that “a marking mechanism for producing an image on media” to not implicate means plus function).

Here, “a mechanism that provides resistance to the flywheel” evokes a class of known structures in the exercise bike industry and thus should not be treated as a means-plus-function limitation. For example, Peloton’s expert admits that (i) “[a] POSITA would understand that there were many ways to provide resistance to a flywheel in a manually adjustable way” and (ii) “[p]eople of skill in the art before 2005 would also have been familiar with these devices and several other ways to provide manually adjustable resistance to a flywheel.” Ex. H at ¶ 144. Mr. Rawls also admits that “[a] POSITA would understand from the specification that the structure, the ‘resistance mechanism’ labeled 16 in Figure 1, is the device that applies friction to the flywheel . . . .” *Id.* at ¶ 146.<sup>8</sup> Furthermore, during his deposition, Mr. Rawls conceded that “there were various mechanisms to provide resistance to a flywheel that were known to a POSITA in 2005.” Ex. I at 152:3-11; *see id.* at 154:10-155:8 (identifying “fan-type brakes,” “rollers that you could sort of squeeze against the tire,” “eddy current brakes” and “permanent magnet brakes” as known mechanisms “for providing resistance to a flywheel for use in a particular exercise bike”). As such, Peloton’s expert admits the claimed “mechanism that provides resistance to the flywheel” connotes a class of known structures to a POSITA. For this reason alone, the limitation provides sufficiently definite meaning as the name for structure and 35 U.S.C. § 112, ¶ 6 should

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<sup>8</sup> Mr. Rawls also fails to mention the existence of magnetic resistance mechanisms known at the time of the invention. *See, e.g.*, Ex. K at 4:60 (“magnetic resistive bicycles”).

not apply. Peloton did not provide an alternative claim construction and no special meaning is set forth in the Asserted Patents, so the Court should adopt a plain and ordinary construction.

The claim language specifies that the mechanism “is manually adjustable by the rider to vary the pedaling resistance” and thus sets forth how the mechanism operates to provide resistance to the flywheel. Ex. A at 7:58-60. This language provides a category of specific known structures as confirmed above by Mr. Rawls. As a result, this context indicates the structural nature of the claimed mechanism and “is sufficient to sustain the presumption against § 112, ¶ 6.” *See Clear Imaging Rsch., LLC v. Samsung Elecs. Co.*, No. 2:19-cv-00326-JRG, 2020 WL 6384731, at \*9 (E.D. Tex. Oct. 30, 2020).

The specification, including through patents incorporated by reference therein, describes different kinds of resistance mechanisms that were known to a POSITA at the time of the invention. *See* Ex. A at FIG. 1; 1:42-46; 1:54-60; 3:5-15; 6:39-56; Ex. M, ’185 patent at 4:51-56; Ex. N, ’608 patent at 5:8-14; Ex. K at 7:30-44. In particular, the specification notes that “[t]he rider may adjust the resistance device according to the resistance displayed. . . . Alternatively, the resistance may be computer controlled and change automatically.” Ex. A at 6:39-50. Furthermore, the incorporated by reference U.S. Patent No. 6,468,185 (the “185 patent”) states that “[t]he stationary exercise bicycle may comprise a dual chain tension device which is adjustable while the rider is in motion. Moreover, the stationary exercise bicycle may comprise a cable resistance braking system which permits the rider to adjust the resistance of the flywheel. A resistance plate 23 may support a cable to the flywheel.” Ex. M at 4:51-56. This shows that it was understood that the claimed “mechanism” encompassed well-understood categories of structures, and it would be improper to limit the claim term to one specific structure disclosed in one specific drawing.

As noted above, the claimed “mechanism that provides resistance to the flywheel” refers

to several known structures well understood by one of ordinary skill in the art. The extrinsic evidence supports the conclusion that mechanism refers to a physical structure of parts configured to operate in a known manner to provide resistance to the flywheel. For example, the term “mechanism” is defined as (i) “a system of parts working together in a machine; a piece of machinery,” Ex. O, The New Oxford American Dictionary (1st ed. 2001) at 1060; and (ii) “a machine or part of a machine that performs a specific task” Ex. P, Bloomsbury English Dictionary (2nd ed. 2004) at 1168. Accordingly, the Court should adopt the plain and ordinary meaning of the term and § 112, ¶ 6 does not apply.

**E. The “Computer . . . Configured to . . .” Terms Should Be Given Their Plain and Ordinary Meaning.**

<b>Term (Claim No.)</b>	<b>Mad Dogg’s Construction</b>	<b>Peloton’s Construction</b>
“a computer that is coupled to the stationary bike, that is configured to connect with the internet or other computer network . . . and that stores power exerted by the rider.” (’240 patent –1)	No construction required; plain and ordinary meaning; not governed by 35 U.S.C. § 112(f) (pre-AIA § 112(6))	Indefinite, as governed by 35 U.S.C. § 112(f) (pre-AIA § 112(6)), for lacking sufficient structure ( <i>i.e.</i> , algorithms for the recited functions): <ul style="list-style-type: none"> <li>• Recited functions: connecting with the internet or other computer network and storing power exerted by the rider</li> <li>• Disclosed structure: none</li> </ul>
“a computer that is coupled to the stationary bike, that is configured to connect with the internet or other computer network.” (’240 patent – 14; ’328 patent – 1)	No construction required; plain and ordinary meaning; not governed by 35 U.S.C. § 112(f) (pre-AIA § 112(6))	Indefinite, as governed by 35 U.S.C. § 112(f) (pre-AIA § 112(6)), for lacking sufficient structure ( <i>i.e.</i> , algorithms for the recited function): <ul style="list-style-type: none"> <li>• Recited function: connecting with the internet or other computer network</li> <li>• Disclosed structure:</li> </ul>

		none
“the computer is configured to measure the pedaling resistance and the rider’s cadence and is configured to calculate power exerted by the rider based on the pedaling resistance and the rider’s cadence” (’240 patent – 14; ’328 patent – 1)	No construction required; plain and ordinary meaning; not governed by 35 U.S.C. § 112(f) (pre-AIA § 112(6))	Indefinite, as governed by 35 U.S.C. § 112(f) (pre-AIA § 112(6)), for lacking sufficient structure ( <i>i.e.</i> , algorithms for the recited functions): <ul style="list-style-type: none"> <li>• Recited functions: measuring the pedaling resistance and the rider’s cadence and calculating power exerted by the rider based on the pedaling resistance and the rider’s cadence</li> <li>• Disclosed structure: none</li> </ul>

The claim terms (i) “**a computer** that is coupled to the stationary bike, **that is configured to connect** with the internet or other computer network . . . and **that stores** power exerted by the rider,” Ex. A at 7:61-67, (ii) “**a computer** that is coupled to the stationary bike, **that is configured to connect** with the internet or other computer network,” *id.* at 8:66-9:1, and (iii) “**the computer is configured to measure** the pedaling resistance and the rider’s cadence **and is configured to calculate** power exerted by the rider based on the pedaling resistance and the rider’s cadence,” *id.* at 9:5-8, should be construed in accordance with their plain and ordinary meaning. They recite well-understood structures, such as “computer,” “internet,” and “computer network,” in the context of non-technical cycling terms, such as “pedaling resistance” and “rider’s cadence,” that a lay juror would have no difficulty understanding.

Peloton’s request to construe the terms under 35 U.S.C. § 112, ¶ 6 is misplaced because Peloton cannot overcome the strong presumption that § 112, ¶ 6 does not apply in the absence of the word “means.” *See, e.g., Zeroclick*, 891 F.3d at 1007. Here, as in other cases, the claimed “computer” evokes a class of well-known structures and thus should not be treated as a means-

plus-function limitation. *See, e.g., Zak v. Facebook, Inc.*, No. 4:15-cv-13437, 2020 WL 589433, at \*9 (E.D. Mich. Feb. 6, 2020) (“a person of ordinary skill in the art would recognize that the term ‘computer,’ in the context of the claims [at issue] . . . [possessed] a sufficiently definite meaning as the name for structure” and that “computer” was therefore not a nonce word); *RLIS, Inc. v. Allscripts Healthcare Sols., Inc.*, Nos. 3:12-CV-208, 3:12-CV-209, 2013 WL 3772472, at \*14-16 (S.D. Tex. July 16, 2013) (“computer system under software control,” “computer executable database software,” and “computer software” were not nonce terms and were not means-plus-function limitations); *Perdiem Co, LLC v. IndusTrack LLC*, No. 2:15-cv-727-JRG-RSP, 2016 WL 3633627, at \*41 (E.D. Tex. July 7, 2016) (rejecting argument that “one or more computer servers configured to” was a nonce word or governed by 35 U.S.C. § 112, ¶ 6).

Furthermore, this Court has repeatedly held that a related term, “processor,” is a structure-connoting term and not subject to 35 U.S.C. § 112, ¶ 6. For example, in *Smartflash LLC v. Apple Inc.*, this Court reasoned that, because a processor can “perform certain functions even without specific instruction,” the term “processor” independently “recites at least some structure,” and the defendant failed to overcome the presumption that § 112, ¶ 6 does not apply. 77 F. Supp. 3d 535, 541-42 (E.D. Tex. 2014). The claimed “computer” here is a structure-connoting term which recites substantially more “structure” than the “processor” in *Smartflash*. *Accord Clear Imaging Rsch.*, 2020 WL 6384731, at \*9 (“[T]he Court rejects Defendants’ position and determines that the ‘processor . . . configured to . . . ’ terms are not governed by § 112, ¶ 6 and that they have their plain and ordinary meanings without the need for further construction.”); *SEVEN Networks, LLC v. Apple Inc.*, No. 2:19-CV-115-JRG, 2020 WL 1536152, at \*49 (E.D. Tex. Mar. 31, 2020) (“[T]he term ‘processor’ refers to a well-known structure, and the claims recite that this well-known structure has a particular configuration in the claimed invention.”); *Panoptis Pat. Mgmt., LLC v.*



*Blackberry Ltd.*, No. 2:16-CV-62-JRG-RSP, 2017 WL 497571, at \*18-19 (E.D. Tex. Feb. 7, 2017) (“Here, ‘processor’ is not a ‘nonce’ term but rather connotes a class of structures.”); *Realtime Data, LLC v. Rackspace US, Inc.*, No. 6:16-CV-00961-RWS-JDL, 2017 WL 2590195, at \*15-16 (E.D. Tex. June 14, 2017) (“processor” was not a nonce term because the patent “disclose[d] the objectives and operations of the processor, such that in combination with the ‘structure-connoting term’ itself, means-plus-function claiming is inapplicable”); *Advanced Mktg. Sys., LLC v. CVS Pharmacy, Inc.*, Nos. 6:15-cv-134-JRG-KNM, 6:15-cv-137-JRG-KNM, 2016 WL 1741396, at \*19-20 (E.D. Tex. May 3, 2016) (finding “data processor” not to be a means-plus-function term); *Syncpoint Imaging, LLC v. Nintendo of Am. Inc.*, No. 2:15-cv-00247-JRG-RSP, 2016 WL 55118, at \*20 (E.D. Tex. Jan. 5, 2016) (finding that “processor” has its plain and ordinary meaning because “one of ordinary skill in the art would understand the structural arrangements of the processor from the recited objectives and operations of the processor”); *E-Watch Inc. v. Apple, Inc.*, No. 2:13-CV-1061-JRG-RSP, 2015 WL 1387947, at \*10-14 (E.D. Tex. Mar. 25, 2015) (rejecting defendant’s arguments that “processor” phrases in the patent invoked 35 U.S.C. § 112, ¶ 6); *Cypress Lake Software*, 382 F. Supp. 3d at 615 (term “processor configured for” not means-plus-function).<sup>9</sup>

Peloton’s expert does not contend that the term “computer” fails to represent a class of well-known structures. Instead, Mr. Rawls, who is not an expert in computer science and is not

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<sup>9</sup> See also *Razor USA LLC v. DGL Grp., Ltd.*, No. 19-12939-JMV-MF, 2021 WL 651257, at \*13 (D.N.J. Feb. 19, 2021) (“Words such as computer, microprocessor, processor, program, or user interface code will not be considered nonce words and will not rebut the presumption that § 112(f) does not apply if a person of ordinary skill in the art can ‘reasonably discern’ from the claim language that the words (computer, microprocessor, processor, program, and/or user interface) are a specific reference to conventional items ‘existing in the prior art at the time of the’ invention.”); *SkyHawke Techs., LLC v. DECA Int’l Corp.*, No. CV-18-1234-GW-PLAx, 2020 WL 2527050, at \*4 (C.D. Cal. Feb. 20, 2020) (“processor” did not implicate means-plus-function because the term, “standing alone, does connote some structure to a POSA”).

proficient in any programming languages,<sup>10</sup> *initially* claimed that the computer limitation should be interpreted as means-plus-function terms because a “POSITA *could not* program any computer to ‘connect with the internet or other computer network’ and ‘store power exerted by the rider’ without being given some description of how to do so through an algorithm or some other form of structure recited.” Ex. H at ¶ 47 (emphasis added).<sup>11</sup> Under cross-examination, however, Mr. Rawls *disavowed these opinions* and conceded, as he must, that (i) “a POSITA . . . would have been able to connect a computer to the internet in 2005 without being provided a specific algorithm,” Ex. I at 62:23-64:5; (ii) there “were known ways to measure the power and resistance to a POSITA” in 2005, *id.* at 68:18-70:6; and (iii) “a POSITA could have developed an algorithm to be able to store the power exerted by a rider on a computer in 2005,” *id.* at 71:7-73:19. Mr. Rawls also acknowledged that a POSITA knew that a computer could be connected to the internet by using a device like a modem or a router, *id.* at 77:10-14, and knew that power data exerted by a rider could have been stored in the memory of a computer, *id.* at 72:8-22.

The specification of the Asserted Patents clearly describes a class of known structures represented by the claimed “computer,” including:

- “The display screen includes *a computer or other device to store and/or provide instructions.*” Ex. A at 3:4-5;
- “The *computer preferably stores* riding instructions that are conveyed to the rider through display 100. The *computer may also receive instructions and/or data* from the rider through an input device 150 contained within the display 100 . . . .” *Id.* at

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<sup>10</sup> Ex. I at 28:15-23, 32:5-10.

<sup>11</sup> This opinion is seemingly at odds with Mr. Rawls’s position that “storing, displaying, and calculating the power exerted by the rider was well known in the art since at least the 1980s.” Ex. H at ¶ 36.

3:58-64;

- “display 100 *may include a device enabling connection of the computer with the internet or some other computer network*. In this embodiment, the computer may send and receive data over the internet.” *Id.* at 4:66-5:7;
- “Handlebar 14 may include one or more sensors 24 to measure the rider’s pulse and heart rate. *This information may be sent to the computer* (discussed below). *The computer may also receive* heart rate signals from a monitor/transmitter worn by the rider.” *Id.* at 3:24-28;
- “The *computer may store* the workout parameters and rider’s fitness progress based on the duration of the workout, power exerted during prior workouts, calories burned or other parameters.” *Id.* at 4:46-55;
- “The *computer may store and generate* any number of work out routines including preprogrammed ones, routines saved by the user, and new routines based upon the rider’s specific parameters.” *Id.* at 5:29-49;
- “The *computer in display 100* may be coupled to the pedal assembly 18 *so that the computer may measure* the rider’s actual cadence.” *Id.* at 6:8-20;
- “When the resistance value on display 128 changes, it may flash to attract the rider’s attention . . . . Alternatively, *the resistance may be computer controlled* and change automatically.” *Id.* at 6:39-50;
- “The speaker *may be connected to a computer*, a stereo, a video monitor, or other type of multi media device.” *Id.* at 7:4-11; and
- “Additionally, an ergometer may be attached to the present invention. Also, *a computer controlled* energy measuring and indicating device may be attached to the present

invention.” Ex. M, ’185 patent at 4:47-50.<sup>12</sup>

Furthermore, in 2005, the word “computer” was understood to be “[a] *device* that consists of one or more associated *processing units and peripheral units*, that is controlled by *internally stored* programs, and that can perform substantial computations, including numerous arithmetic operations, or logic operations, without human intervention during a run. Note: May be stand alone, or may consist of several interconnected units.” Ex. Q, IEEE 100 The Authoritative Dictionary of IEEE Standards Terms (7th ed. 2000) at 207-08.<sup>13</sup> Any state of the art general computer in 2005 could have been configured to “connect” to networks, to “store” information, to “measure” inputs and to “calculate” resulting outputs as is required by the disputed terms and a POSITA would not have required step-by-step instructions to accomplish these tasks.

**F. The Terms Encompassing “the Rider is Provided With Instructions . . .” Should Be Given Their Plain and Ordinary Meaning.**

<b>Term (Claim No.)</b>	<b>Mad Dogg’s Construction</b>	<b>Peloton’s Construction</b>
“the rider is provided with instructions for the rider to manually adjust pedaling resistance, and instructions for the rider to vary cadence and riding positions including sitting and standing positions.” (’240 patent – 1; )’328 patent – 1)	No construction required; plain and ordinary meaning	“the rider is provided with instructions, <b><u>without an instructor</u></b> , for the rider to manually adjust pedaling resistance and to vary cadence and riding positions including sitting and standing positions”
“the rider is provided with instructions for the rider to manually adjust pedaling resistance and to vary cadence.” (’240 patent – 14)	No construction required; plain and ordinary meaning	“the rider is provided with instructions, <b><u>without an instructor</u></b> , for the rider to manually adjust pedaling resistance and to vary cadence”

<sup>12</sup> Peloton’s expert admits that an “ergometer” is a “power meter” used “to provide the power exerted by the rider as an output.” Ex. H at ¶ 36.

<sup>13</sup> Peloton’s expert does not dispute this definition or provide his own definition of “computer.”

Peloton proposes to import the negative limitation of “without an instructor” into the construction of (i) “the rider is provided with instructions for the rider to manually adjust pedaling resistance, and instructions for the rider to vary cadence and riding positions including sitting and standing positions,” Ex. A at 8:3-7, and (ii) “the rider is provided with instructions for the rider to manually adjust pedaling resistance and to vary cadence,” *id.* at 9:11-13. Nothing in the specification justifies departing from the plain and ordinary meaning of this claim limitation.

There are “only two exceptions to the general rule” that claim terms are construed according to their plain and ordinary meaning: “1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of the claim term either in the specification or during prosecution.” *UNILOC 2017 LLC*, 2020 WL 805271, at \*4 (internal quotations omitted). The standard for lexicography or disavowal is “exacting” and any disavowal of claim scope must be “clear and unmistakable.” See *GE Lighting Sols., LLC v. AgiLight, Inc.*, 750 F.3d 1304, 1309 (Fed. Cir. 2014) (“The standards for finding lexicography and disavowal are exacting.”); *Thorner v. Sony Comput. Ent. Am. LLC*, 669 F.3d 1362, 1366-67 (Fed. Cir. 2012) (“The standard for disavowal of claim scope is . . . exacting” and disavowal must be “clear and unmistakable”); *UNILOC 2017 LLC*, 2020 WL 805271, at \*4, \*9-10 (reciting the exacting standard for disavowal and finding that there was no disavowal or lexicography to justify limiting the claim term “digital image,” instead applying its plain and ordinary meaning); *Max Blu Techs., LLC v. Cinedigm Corp.*, No. 2:15-CV-1369-JRG, 2016 WL 3688801, at \*6-7, \*11 (E.D. Tex. July 12, 2016) (reciting the exacting standard for disavowal and finding that defendant did not present “evidence sufficient to establish” disavowal).

No passage in the specification provides an express definition or constitutes disavowal. In fact, express language in the specification supports the logical conclusion that the claimed

“instructions” may be provided by human instructors and contradicts Peloton’s forced narrow interpretation to the contrary. For example, the claimed exercise bike allows a user to, among other things, time-shift a live exercise class “so that the rider obtains the benefits of such classes despite the fact that the rider’s schedule conflicts with prescheduled instructor-led classes.” Ex. A at 2:64-3:2; *see also id.* at Abstract (“The invention allows a rider to obtain benefits of a group, instructor-led class though the rider’s schedule does not permit the rider to participate in the class.”).

Other portions of the specification disclose instructions contained on video further showing that the claimed “instructions” may be provided by human instructors. For example, the background of the Asserted Patents recognizes that “[p]reviously, videos of an instructor providing instruction for an indoor cycling bike class have been available for an individual to watch as he or she rides an indoor cycling bike. However, *such videos require a separate VCR and monitor* to play the video.” *Id.* at 2:20-24. The specification, in describing the invention, provides a solution to that issue by stating that “display 100 may include a device to receive a CD-ROM, DVD, *VHS tape* or other storage medium that contains or receives riding instructions.” *Id.* at 4:66-5:2.

In addition, the display of the claimed invention may include a speaker “connected to a computer, a stereo, a video monitor, or other type of multi-media device [to] enable the rider *to listen to instructions or information* as well as various entertainment media such as music.” *Id.* at 7:4-11. By distinguishing “instructions” from computer-generated information, the specification confirms that the claimed “instructions” may be from an instructor. *See id.*

Despite the foregoing, Peloton claims that certain snippets in the specification override these plain teachings and require importation of the negative limitation of “without an instructor.” But none of Peloton’s excerpts constitutes a “clear and unmistakable” disavowal of the ordinary

meaning that the “instructions” may be a recording of a human instructor. *See Thorner*, 669 F.3d at 1366-67. Peloton’s expert could only take the unreasonable position that a “Digital Video Disk” (*i.e.*, DVD) and a “Video Home System” tape (*i.e.*, VHS tape) **cannot** display an instructor’s audio or visual instructions in the claimed invention. Ex. I at 108:22-109:22. He also claims, contrary to the actual disclosure in the specification, that the instructions audible through the speaker of the claimed bike could only be beeps and tones, not human instructions. *Id.* at 102:2-21. Peloton’s position is unsupported by a plain reading of the intrinsic record and should be rejected.

**G. “A Mechanism That Measures the Rider’s Cadence” Should Be Given Its Plain and Ordinary Meaning.**

<b>Term (Claim No.)</b>	<b>Mad Dogg’s Construction</b>	<b>Peloton’s Construction</b>
“a mechanism that measures the rider’s cadence” (’240 patent – 14)	No construction required; plain and ordinary meaning; not governed by 35 U.S.C. § 112(f) (pre-AIA § 112(6))	Indefinite, as governed by 35 U.S.C. § 112(f) (pre-AIA § 112(6)), for lacking sufficient structure: <ul style="list-style-type: none"> <li>•Recited function: measures the rider’s cadence</li> <li>•Disclosed structure: none</li> </ul>

The claim term “a mechanism that measures the rider’s cadence” should be construed in accordance with its plain and ordinary meaning. It is readily understandable by a lay juror given its use of non-technical, straightforward language.

Peloton cannot overcome the strong presumption that § 112, ¶ 6 does not apply in the absence of the word “means.” *See, e.g., Zeroclick*, 891 F.3d at 1007. As discussed above in Section III.D, this Court has regularly found that claims terms including the word “mechanism” do not invoke the statutory means-plus-function provision. *See, e.g., Nanology Alpha LLC*, 2017 WL 5905272, at \*9-11; *Accuhale LLC*, 2013 WL 4045904, at \*8; *Unicorn Glob. Inc.*, 2020 WL 2745692, at \*5.

Here, similar to the other “mechanism” claim term discussed in Section III.D, “a mechanism that measures the rider’s cadence” clearly evokes at least a class of known structures and thus should not be treated as a means-plus-function limitation. For example, Peloton’s expert admits that (i) the specification “discloses [a] computer coupled to a pedal assembly so that the computer may measure the cadence and then [provides] certain displays based on that cadence,” Ex. H at ¶ 64; and (ii) that “[a] POSITA would understand that by 2005 there were many ways, and many devices, to measure a rider’s cadence. These may include devices or components such as magnets, sensors, or other electronics attached to a bicycle pedal, crank arm, chain stay, or different parts of a wheel,” *id.* at ¶ 93. He confirmed in his deposition that these mechanisms for measuring cadence were known to a POSITA by 2005. Ex. I at 90:3-21; 94:3-6. Peloton’s expert thus admits that at least a well-known category of structures would be connoted to one of ordinary skill in the art by the claimed “mechanism that measures the rider’s cadence.” For this reason alone, the limitation provides a sufficiently definite meaning as the name for structure and 35 U.S.C. § 112, ¶ 6 should not apply.

The claim language provides substantial guidance about the structure of the claimed “mechanism that measures the rider’s cadence.” Independent claim 14 specifies that “*the computer is configured to measure* the pedaling resistance and *the rider’s cadence* and is configured to calculate power exerted by the rider based on the pedaling resistance and the rider’s cadence.” Ex. A at 9:5-8. This surrounding claim language connotes structure for the claimed mechanism, describes how the “mechanism that measures the rider’s cadence” operates, and “is sufficient to sustain the presumption against § 112, ¶ 6.” *Clear Imaging Rsch.*, 2020 WL 6384731, at \*9.

The specification adds to the term’s structure and provides disclosure supporting the plain and ordinary meaning of this term. *See* Ex. A at FIG. 1; 3:3-13; 3:29-31; 3:49-4:10; 4:22-29; 4:46-



5:7; 5:29-49; 6:8-20; 7:42-47; Ex. M at 4:47-50. In particular, the Asserted Patents note that “[t]he computer in display 100 may be coupled to the pedal assembly 18 so that the computer may measure the rider’s actual cadence. If the rider’s cadence is within the desired range being displayed on a target cadence display 180 located in the display screen 106, a cadence screen 126 that is also located on the display screen 106 may illuminate in a certain way, e.g., non-flashing.” Ex. A at 6:8-20.

As noted above, a POSITA would have been aware of several well-understood structures for the claimed “mechanism that measures the rider’s cadence.” In addition, as discussed in Section III.D, the extrinsic evidence, such as contemporaneous dictionary definitions, supports this conclusion. Therefore, a “mechanism that measures the rider’s cadence” could reasonably be interpreted as “a machine or part of a machine that performs the task of measuring the rider’s cadence.” Ex. P. The plain and ordinary meaning should be applied to this term.

**H. “The Target Cadence Display Revealing the Appropriate Cadence at Which a Rider Should Be Pedaling” Should Be Given Its Plain and Ordinary Meaning.**

<b>Term (Claim No.)</b>	<b>Mad Dogg’s Construction</b>	<b>Peloton’s Construction</b>
“the target cadence display revealing the appropriate cadence at which a rider should be pedaling”( ’240 patent – 7; ’328 patent – 4)	No construction required; plain and ordinary meaning; but if construction is required: “a certain range of cadence at which the rider should be pedaling displayed to a rider”	Indefinite. <i>See</i> “appropriate cadence.” <sup>14</sup>
“appropriate cadence” ( ’240 patent – 7; ’328 patent – 4)	Should be construed as part of “the target display revealing the appropriate cadence at which a rider should be pedaling”; but if construed separately, plain and ordinary meaning but if	Indefinite

<sup>14</sup> Peloton states as follows: “This claim term, whether presented with the additional context or as limited to ‘appropriate cadence’ as below, is indefinite. Peloton does not see the need to construe this claim term in full when the term ‘appropriate cadence’ is sufficient to reflect the parties’ positions.” ECF No. 61 at 6 n.5.

	construction is required: “a certain range of cadence at which the rider should be pedaling”	
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The term “the target display revealing the appropriate cadence at which a rider should be pedaling” should be given its plain and ordinary meaning. Peloton points to no words within the phrase that require construction or that would be confusing to a lay juror.

The specification makes clear that this phrase should be understood in accordance with its plain meaning or the term “appropriate cadence” should be construed as “a certain range of cadence at which the rider should be pedaling displayed to a rider”:

Screen 106 may also include a target cadence display 180 that *provides the rider with a certain range of desired cadence. The cadence range displayed* may change as the riding position change[s]. For example, a higher cadence range may be specified when the rider is seated and a lower cadence range may be specified when the rider is standing and climbing. . . .

If the rider’s cadence is *within the desired range being displayed on a target cadence display* 180 located in the display screen 106, a cadence screen 126 that is also located on the display screen 106 may illuminate in a certain way, e.g., non-flashing. *If the riders cadence is not within the desired range shown on the target cadence display* 180, the rider’s cadence screen showing the rider’s actual cadence may illuminate in a flashing manner which preferably attracts the riders attention so that the rider may adjust his or her cadence to bring it within the desired range.

Ex. A at 6:1-20. Target cadence display 180 provides a range of desired cadence and if the rider’s actual cadence is within the desired range the display “may illuminate in a certain way,” whereas if the rider’s actual cadence is *not* within the desired range the display “may illuminate in a *flashing* manner.” *See id.* Thus, a POSITA would understand that an “appropriate cadence” would correspond to a range of cadence at which the rider should be pedaling as indicated by the target cadence display. There is no ambiguity in the specification as to the meaning of “the target display revealing the appropriate cadence at which a rider should be pedaling.”

Peloton's attempt to argue indefiniteness ignores that it is *the display* which provides a certain range of cadence—the “appropriate cadence”—at which the rider should be pedaling so the range is entirely clear to the exercise bike's user. *See, e.g., id.* at FIG. 1-4; 6:1-20; 6:51-7:3; 7:31-47. The specification unambiguously discloses what “appropriate cadence” means in the context of the claim language and read in light of the specification. The Court should construe the phrase in accordance with its plain and ordinary meaning or adopt Mad Dogg's construction.

#### **IV. CONCLUSION**

For the foregoing reasons, Mad Dogg respectfully requests the Court to adopt its proposed constructions and reject Peloton's proposed constructions.

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Respectfully submitted,

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**CERTIFICATE OF SERVICE**

I hereby certify that counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system per Local Rule CV-5(a)(3) on June 3, 2021.

/s/ Elizabeth L. DeRieux  
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